

Comparisons of Job Characteristics

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation: Biological Scientists, All Other (19-1029)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 70

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Biology	3.7	24.4	14.8	<<	Extensive education and/or training may be required
English Language	11.2	18.2	16.0	<	Expanded education and/or training may be required
Chemistry	4.8	16.4	14.9	<	Expanded education and/or training may be required
Mathematics	9.2	14.7	15.5	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	18.5	16.1	<	A higher skill level may be required
Writing	9.2	16.2	14.4	<	A higher skill level may be required
Science	4.5	16.1	15.7	0	Current skill level may be sufficient
Critical Thinking	10.8	15.7	14.1	<	A higher skill level may be required
Active Learning	8.7	15.0	13.0	<	A higher skill level may be required
Judgment and Decision Making	9.4	13.2	13.1	0	Current skill level may be sufficient
Complex Problem Solving	9.1	13.1	13.4	0	Current skill level may be sufficient
Mathematics	6.2	12.6	12.2	0	Current skill level may be sufficient
Learning Strategies	7.2	12.2	11.7	0	Current skill level may be sufficient

Systems Analysis	6.5	11.0	10.6	0	Current skill level may be sufficient
Systems Evaluation	6.4	10.5	9.8	0	Current skill level may be sufficient
Management of Material Resources	3.7	6.6	5.6	<	A higher skill level may be required
Programming	2.2	5.1	6.3	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	18.5	16.3	<	Some improvement in abilities may be required
Oral Comprehension	12.5	17.9	15.3	<	Some improvement in abilities may be required
Written Expression	9.8	17.9	14.4	<<	Extensive improvement in abilities may be required
Oral Expression	12.4	17.1	15.6	0	Current ability level may be sufficient
Inductive Reasoning	10.2	16.1	16.5	0	Current ability level may be sufficient
Deductive Reasoning	10.6	15.6	15.1	0	Current ability level may be sufficient
Problem Sensitivity	11.1	14.4	15.8	0	Current ability level may be sufficient
Near Vision	11.1	13.9	12.3	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	13.3	12.2	0	Current ability level may be sufficient
Category Flexibility	9.0	13.2	13.0	0	Current ability level may be sufficient
Number Facility	6.3	11.8	11.9	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 52

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation: Biological Scientists, All Other (19-1029)

Tools and Technologies	Exclusivity
Business function specific software	1
Chemical evaluation instruments and supplies	10
Chromatographic measuring instruments and accessories	16
Computers	1
Content authoring and editing software	1

Data management and query software	1
Development software	4
Electrochemical measuring instruments and accessories	9
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Manual test kits and quality controls and calibrators and standards	33
Network applications software	1
Operating environment software	12
Spectroscopic equipment	10

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.